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UGANDA PROTECTORATE.

MEDICAL DEPARTMENT.

ANNUAL REPORT.

For the Year ended 31st December, 1944.

I. STAFF.

(i) *Headquarters.*—The Deputy Directorship of Medical Services held for eighteen months by Dr. J. C. R. Buchanan, who proceeded to England in December on leave prior to transfer to the South Pacific is again vacant, as is the Assistant Directorship. A Senior Medical Officer has been stationed at Headquarters.

The Director of Medical Services was absent from the Territory between March and July. Nominally on leave, he went to England to discuss with the Medical Advisers to the Secretary of State and Colonial Office Committees, medical research in East Africa and the post-war development programme for the Uganda Protectorate.

(ii) *Provincial and District.*—The promotion at the end of the year of one of our Medical Officers added a fifth to the Senior Medical Officers cadre. Two of our Senior Medical Officers are still seconded to the Army but one of these devotes part of his time to civil duties. Every endeavour has been made to maintain district medical activities at pre-war standards but there is little doubt that while work at hospitals has been kept efficient, rural areas have suffered consequent upon an enforced reduction in touring by European personnel due as much to the difficulty of maintaining effective transport as to pressure of other duties.

2. With improved facilities for the taking of leave in Great Britain, endeavours have been made to allow officers of this department to avail themselves in rotation of the opportunity of a rest of three months in the United Kingdom and to return refreshed to the duties involved in post-war development. The increased incidence of ill health connected with the pressure and tension of the past few years has unfortunately necessitated the relieving of a number of medical personnel, who could ill be spared. It is doubtful if all of those sent home on medical grounds will be fit to resume duty.

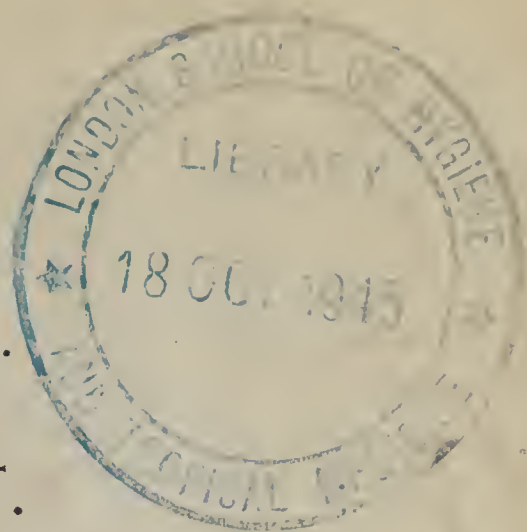
3. Unless recruits to the service are forthcoming in the near future there is every possibility that European medical officers may have to be withdrawn from certain district stations.

4. It has been extremely difficult to maintain our nursing sister staff at effective strength for although recruits have been arriving at irregular intervals, reinforcements have not kept pace in numbers or time with the casualties occasioned by ill health and marriage. The position is deteriorating and is a constant cause of anxiety.

The experiment of posting African nurses for duty at the Kampala European hospital in substitution of European nursing staff is reported to be working satisfactorily and it is intended, when more are available, to increase the number in the European hospital and introduce them into Asian hospitals.

ARMY SECONDMENTS.

5. A pathologist and three medical officers were returned from the Army to civil employment and we continue to retain temporarily the services of three junior R.A.M.C. officers on civil duty, one of whom is employed as a pathologist.



II. GENERAL.

6. The deterioration in the health of the European population, official and unofficial, resulting from the strain imposed by sustained war conditions, continues to be cumulative. As might be expected, the commonest signs of deterioration are of neurotic origin but while the numbers reporting ill have not greatly increased, it is manifest that longer periods are required for them to return to normal. It is hopefully anticipated that the resumed practice of the grant of leave to the United Kingdom will effect an improvement in existing conditions.

7. The leave of Asian officers in their home countries has been greatly curtailed by reason of the difficulties associated with ocean transport.

8. Overcrowding in most of our hospitals persists and there is growing evidence that the African is taking greater advantage of hospital facilities even in the more backward districts.

9. Despite difficulties connected with the importation of building materials and skilled labour shortages, temporary expansions of many of our hospitals, especially at Mulago, have been effected. Some permanent buildings have been erected at Masaka.

10. A comprehensive report incorporating recommendations for the post-war development of medical services in Uganda was submitted to Government early in the year. This report received the approval of Government and was also discussed by the Director of Medical Services with the Colonial Medical Advisers and the Colonial Advisory Medical Committees during his visit to England. His recommendations have been generally approved. Following their acceptance, further applications have been made for financial assistance from funds provided under the Colonial Development and Welfare Act and funds for the following works have now been sanctioned.

		<i>Amount.</i>		<i>Date of Approval.</i>
Mulago Hospital		£477,500	...	6-10-44.
Health Services including—				
Training				
Malaria				
Venereal Diseases		£350,000	...	
Nutrition Survey				
Tuberculosis				6-9-44.
Ambulance Services				
Tsetse and Trypanosomiasis		£50,000	...	
Research				

11. The appointment of an architect, skilled in hospital designing, to undertake the preparation of plans for the new Mulago Hospital and Medical School, is expected shortly. It is desirable that all plans should be ready at the earliest possible date in order that construction can proceed immediately building materials become more readily available.

12. A conference of Directors of Medical Services was held at Nairobi in September and was followed by a meeting of the Joint East African Examining Board in Medicine. With the approval of this Board and Makerere Council, a Diploma has now been issued to all graduates of Mulago Medical School who completed their course of training in 1936 and succeeding years.

III. RELATIONS WITH HIS MAJESTY'S FORCES.

13. The physical examination of recruits for the army was continued as an additional duty imposed on all district medical officers and assistant medical officers. The standard of physical fitness for recruits of other than combatant forces was lowered to meet the demands on a depleted reserve of manpower in areas from which recruits have been steadily drawn in recent years.

14. The dépôt started at Tororo in 1942 for building up the health of recruits prior to posting out to Army units, has proved of great value, for it has made possible the acceptance of recruits of somewhat lower standards of fitness than originally insisted on. Rational feeding and regular exercise have conduced to a rapid improvement in the health and bearing of young men who appeared indifferent material on enlistment.

15. Careful consideration is being given by the Government to the reabsorption into civil life of demobilised soldiers, and, conditional on the monthly rate of demobilization, it should be well within the bounds of possibility for the process to be effected smoothly and with no undue disturbance to the life and health of the country.

16. The Tororo hospital, in consequence mainly of its situation on the boundary of the Protectorate, has now developed into a dispersal centre for soldiers discharged on medical grounds. Increased accommodation has been provided and a European medical officer, seconded from the army, is specially detailed for duty at this unit. Soldiers requiring continuation treatment are either detained at Tororo or transferred to district hospitals nearest their homes. Additional ward accommodation to deal with soldiers discharged on medical grounds is being provided at a number of district hospitals.

IV. REFUGEES AND INTERNEES.

17. The refugee population increased to 6,114 with additions and transfers from neighbouring territories. The refugees, principally Polish women and children, are accommodated at Koja in Buganda and Nyabeya in Bunyoro. Their numbers were 2,574 and 3,540 respectively at each place.

18. Internees, of whom the bulk is Italian, are similarly accommodated in camps at Entebbe, where the total was 956, and at Bombo 114. There are some women and children in the latter camp. A few internees were repatriated during the course of the year. The morbidity rate from all causes in both groups is favourably comparable with that of the local European population and from tropical diseases has been no higher than could be expected from a non-immune population. Hygiene and sanitation in the camps has been satisfactorily maintained, and protective vaccinations and inoculations have been afforded to all against yellow fever, enteric fevers and smallpox.

19. Each community has its own medical staff advised and supervised by Medical Officers of the Protectorate Service. New hospitals and extensions of hospital accommodation have been provided, adequate to requirements. The training of Polish nurses continues, but no examination or tests of proficiency, other than local class tests, have been held. Both Poles and Italians have much improved in health since their arrival in this country and have demonstrated that Europeans can be rapidly acclimatised to tropical conditions.

V. DRUGS AND SUPPLIES.

20. The Government continued the monopoly of importation of drugs and other medical requisites and a commercial firm acted as Government Agent for the distribution of these supplies to all mission hospitals, private practitioners, etc. In the latter half of the year permits were issued for a certain number of medical requisites to be imported through normal trade channels and the Agent assisted some of the missions and private practitioners by preparing and forwarding a bulk indent to cover their needs.

21. Our endeavours were continued in the reduction of orders placed on Great Britain for hospital equipment, and such items as beds, lockers and ward trolleys, were made locally as necessary, in wood. The local articles while serving our immediate needs will require replacement at an early date and it must be expected that large indents for such items will be submitted when peace returns to Europe.

Blankets, linen, etc., have been obtained from any available sources, and largely from India, but imports have even been made direct from South America. The articles obtained have not been up to pre-war standards and replacements will have to be made at an early date.

With clothing, blankets, etc., in short supply to the public and only procurable at greatly enhanced prices there has unfortunately been an increase in the loss of hospital stores. Efforts to combat stealing have been made but even with police co-operation it has been found difficult to reduce losses.

VI. LEGISLATION.

22. The general tendency during the war years has been to reduce the enactment of legislation that could suitably be effected at a more opportune and propitious season. Public Health measures have therefore not been obtruded.

23. To meet special circumstances of some urgency to the military authorities regulations for the Control of Venereal Diseases were published. Revision of the Drainage and Sanitation Rules under the Public Health Ordinance, 1935, has been undertaken against the time when they can be brought forward, and existing Regulations have been amended and replaced as occasion required, notably the Bakehouse Rules, Licensing of Tradesmen Rules, School Building Rules and Vaccination against Yellow Fever.

VII. PUBLIC HEALTH.

24. The total of cases of all diseases coming under qualified medical personnel for examination and treatment is as under :—

New cases, including examinations ...	562,342
Reattendances	769,466
Total attendances	1,331,808

In the aggregate, cases treated by medical assistants at dispensaries and aid posts were :—

New cases	854,986
Reattendances	1,431,445
Total attendances	2,286,431

The work done by Mission hospitals at many centres in the country has been effectively maintained, in spite of the handicaps imposed by the times.

VIII. GENERAL DISEASES.

25. *Epidemic, endemic and infectious diseases.*—The sum of cases recorded in this group is 167,881 with 932 deaths.

General diseases, including those not specifically referred to under definite headings, totalled 24,255.

Affections of the circulatory system.—821 cases are recorded and 67 deaths.

Affections of the respiratory system attained a total of 58,919. Among these, the number admitted for pneumonia was 2,778. Deaths resulting from this disease amounted to 249.

Diseases of the digestive system.—The continuance of famine conditions for a period with dietary imbalance were, in some measure, responsible for the maintenance at a high level of digestive disorders. Cases recorded total 55,173.

Diseases of the genito-urinary system.—Non-venereal cases that received treatment numbered 3,261.

Affections of the skin and cellular tissue.—For these ailments 85,322 patients sought relief.

Affections produced by external causes.—51,602 cases were recorded.

IX. COMMUNICABLE DISEASES.

(i) INSECT BORNE.

MALARIA.

26. Malaria appeared in epidemic form and even township areas protected by permanent drainage schemes and routine oiling, were affected. The epidemic was fostered by unusual rains. Small showers at frequent intervals, with no heavy downpours, created conditions suitable for the breeding in mass of *Anopheles gambiae* and made routine control measures difficult. The introduction of more intensive oiling and stricter control coincided with an improvement in the weather and brought about the cessation of the epidemic.

27. In Kigezi, which is a highland area, malaria was reported in areas previously considered free of the disease. Investigations proved that cases were occurring in the vicinity of swamps, which were being partly drained and cultivated to produce increased crops of sweet potatoes. Dissections of *anopheles* caught in huts in the affected area incriminated as the vector *Anopheles christyi*, a species not previously considered dangerous. Stricter control of plantations in swamps will, it is hoped, prevent the occurrence of further epidemics in this district.

28. Antimalarial works of major importance were undertaken at Kampala and Jinja, but in view of labour difficulties the progress made was small.

BLACKWATER FEVER.

29. A total of 187 cases, 40 of which were fatal are entered in the returns. Of these 73 cases and 12 deaths occurred among officials.

YELLOW FEVER.

30. No human cases were discovered but the Yellow Fever Research Institute of the Rockefeller Foundation continued its investigations, studying not only the yellow fever virus but also other viruses encountered during the course of their work in the country. The yellow fever virus was isolated once from a mixed collection of *Aedes* mosquitoes taken in a small section of uninhabited forest in Bwamba county of the Toro district west of the Ruwenzori range. During the investigations six strains of a virus believed to be that of Rift Valley fever were also obtained.

31. The Institute continued the study of animals found in various parts of the country in their search for animal hosts of yellow fever virus. It has also been studying mosquitoes caught at various levels above ground, amongst trees in the Bwamba Forest. The work it has done has thrown much light on the incidence of immunity to yellow fever amongst monkeys and has also shown that both *Anopheles gambiae* and *funestus* can be taken at high levels above ground in forest areas.

RELAPSING FEVER.

32. The spread of relapsing fever to areas not previously infested with *Ornithodoros moubata* continues to present a serious problem. Present opinion tends to the belief that the tick is being spread over the country by the migrations of labourers entering the territory from Ruanda-Urundi and the Belgian Congo. Government is planning the provision of camps for the use of this labour at points of entry into the territory and on the roads they normally travel along, to places of employment. When these camps are established the medical department propose to introduce disinfestation of the personal belongings of these immigrants and it is hoped by these measures that the risk of the spread of ticks will be removed or reduced.

PLAGUE.

33. The steady decrease in the number of cases of plague has continued and only seven cases were reported, all from Mengo district. The mortality rate was 100%. While it is true to say that improved housing conditions are tending to reduce the rat population in living quarters, progress made up to date in this direction cannot be held as wholly accountable for the steady decline in the incidence of the disease.

TRYPANOSOMIASIS.

34. The sustained reduction in the incidence of cases of human trypanosomiasis gives cause for satisfaction, but the infection persists in certain areas. *T. rhodesiense* infections continued to occur in Busoga and Mbale districts and on Buvuma Island in the Mengo district. In all these areas 150 new cases were reported, 37 proving fatal. *T. gambiense* infections continued in the following districts; West Nile, Acholi, Bunyoro, Ankole and Toro. In the West Nile 148 new cases occurred but no deaths were reported. In the other districts there were 69 cases in all with 5 deaths.

35. The finding reported previously that *G. pallidipes* was responsible for the spread of *T. rhodesiense* in Busoga and elsewhere, has led to a more careful study by medical entomologists of this species of tsetse. More attention has also been given to *G. morsitans*. While the entomological staff has not been increased and therefore surveys made have been limited in extent, considerable evidence has accumulated that both these species of tsetse fly have spread in recent years and that during the past year their advance has been even faster than was considered likely. *G. morsitans* is deploying from the north and west and invading ever increasing areas of Acholi, Lango, Karamoja and the county of Buruli in Buganda, while *G. Pallidipes* has in recent times occupied the two counties of Buruli and Bugerere in Buganda and is suspected to be in the counties of Kyagwe and Bulemezi, also in Buganda. While this expansion of tsetse is a menace to the health of the human population, it has already decimated the cattle in the areas infested.

TYPHUS.

36. Four cases of tick borne typhus were diagnosed and confirmed by laboratory tests.

(ii) OTHER INFECTIOUS DISEASES.

SMALL-POX.

37. A mild form of small-pox was introduced in 1943 into Uganda from Kenya and, in spite of all measures taken to protect the population, the infection has not yet been brought wholly under control. A total of 4,737 cases was notified, with only 3 terminating fatally. Of this total, 3,174 occurred in Busoga, but almost every part of the country produced a few cases.

POLIOMYELITIS.

38. There were three cases, none fatal.

DIPHTHERIA.

39. Seven cases and three deaths from this cause were reported.

CEREBRO-SPINAL MENINGITIS.

40. 1,850 cases with 217 deaths were laid to the account of this disease. The area most affected was Teso district where 783 cases and 65 deaths occurred. Acholi had 334 cases with 51 deaths and the West Nile 387 cases and 79 deaths. Most of the cases that ended fatally were either reported after death had occurred or at a late stage of the disease.

DYSENTERIES.

41. The incidence of these conditions remains high. The total recorded was 2,795, of which 753 were amoebic and 1,182 bacillary, the remainder being unclassified. Between the rains, bacillary dysentery attained epidemic proportions in the dry volcanic areas of Bufumbiro, from which it spread to other counties in Kigezi District. Water supplies in certain inhabited areas of this district are extremely poor and take the form for the most part of surface water holes. The epidemic continued for several weeks in virulent form. Laboratory cultures demonstrated the causative organism to be Shiga's bacillus.

INFLUENZA.

42. This infection accounted for a total of 6,602 cases.

SYPHILIS AND YAWS.

43. The figures for these diseases show an increase. 24,021 of the former and 27,655 of the latter were treated.

GONORRHOEA.

44. 10,526 patients received treatment.

LEPROSY.

45. Attendances at Government hospitals for this disease totalled 455. The numbers accommodated at Mission controlled Leper Asylums are shown below :—

Particulars.	Buluba.	Nyenga.	Bunyoni.	Teso.	
				Kumi.	Ongino.
No. of resident	215	175	488	588	530
„ admitted	138	55	113	64	99
„ of births	—	—	19	—	13
„ of deaths	7	6	20	10	18
„ discharged	82	49	37	38	33

(iii) HELMINTHIC DISEASES.

46. Ancylostomiasis	...	...	...	3,544
Schistosomiasis	...	...	...	787
Other helminthic infections	...	...	...	6,755

X. VITAL STATISTICS.

47. These are tabulated in Appendix A.

There has been no change in the basis of calculations of the various rates.

The accuracy of the figures is questionable, but the margin of error has been more or less constant since the 1931 Census. Details of African immigration and emigration are as yet unrecorded.

BIRTH AND DEATH RATE.

48. The excess of live births over deaths was 25,088 and 6.49 per thousand represents the increase of population. The comparable figures for the previous year were 32,726 and 8.53 respectively.

Recorded still-births numbered 2,970. The still-birth rate for the Protectorate was 2.90. In 1943, the number was 3,547 and the rate for the whole country 3.13.

The Infant Mortality rate was 116·36 per thousand live births, as against a rate of 120·79 in 1943.

The Maternal Mortality rate stood at 6·31, compared with 6·19 in the previous year.

XI. HYGIENE AND SANITATION.

49. *Labour.*—The supervision of labour from its medical facet has constituted a normal duty which has continued to receive attention.

The camp for immigrant labour at Merama Hill close to the Kagera River on the south-west border is nearing completion and will soon be ready for occupation. It is proposed to duplicate this camp at another point of entry of Banyarunda on the same river at Kyaka on the Tanganyika-Uganda Boundary. These camps are intended to provide food and accommodation for immigrants at the commencement of their long journey into Uganda in search of work. Disinfestation of clothing will be effected at these halts as also inspection of vaccination certificates, and records maintained of the numbers entering and leaving the Protectorate. A small hospital unit in charge of an assistant medical officer will be maintained at each camp for those requiring medical care and attention. The currency of famine conditions in Uganda, and to a more severe degree in the adjacent districts of the Belgian Congo, led to the continuance for a few months of the restrictions on immigration.

SCHOOLS.

50. The sanitation of schools has been satisfactorily maintained.

All European and Asian school children in Kampala were examined by a Medical Officer. Curable ailments and disabilities among them were notified to the parents who were advised to consult their medical practitioner. It is very satisfactory to observe that the majority acted on the advice proffered, to the benefit of their children.

51. Funds were again supplied by Government for a continuance of the experiment of providing mid-day meals to children in a limited number of schools in Buganda. The results of the experiments, as could be expected, indicated in general an improvement in the physique and health of the children, and an increased alertness and concentration on afternoon studies. While it is appreciated that the provision of free meals at all schools will involve Government in considerable expenditure, it is submitted that the accruing benefits will more than compensate for the outlay.

TOWNSHIPS AND RURAL AREAS.

52. European Health Inspectors have continued to be posted to areas where they are most needed. The improvement of sanitation and hygiene in villages and small settlements has been largely the responsibility of African Health Inspectors. Lack of material has curtailed the installation of further piped water systems, but the need is constantly kept in mind.

RURAL WATER SUPPLIES.

53. The protection of surface supplies has been advanced to a limited extent. Special attention has been paid to this work in recent months in Kigezi.

XII. PORT HEALTH WORK.

54. Routine disinfestation is conducted of planes alighting at the seaplane base at Port Bell, the fuelling port at Laropi on the Nile, and at the air port of Entebbe. Freon aerosol bombs are used for these disinfestations and have been found much more convenient in use than the pressure pump Aergraph spray. Seventy-seven aircraft passed through the Entebbe airport in the year under review, and all but three, whose arrival was unannounced, were disinsectised. Experiments were conducted in grounded aircraft locally with living caged mosquitoes with a view to ascertaining the minimum lethal dosage and the optimum time exposure of the aerosol insecticide.

XIII. MATERNITY AND CHILD WELFARE.

55. Transport and staff shortages interfered to some extent with routine visits to centres, but hired transport in many instances overcame the handicaps. These services were satisfactorily operated despite the difficulties encountered.

The numbers attending Government and Mission centres are shown in the table below :—

	Government centres.	Mission centres.
Ante-natal first attendances	41,493	15,894
Pregnancies terminated in hospitals	6,047	4,713
Ante-natal re-attendances	97,352	52,557

XIV. MEDICAL EDUCATION.

56. In the higher medical training class, four students sat for the final examination at Mulago. Three of these passed in all subjects, one being referred for six months in midwifery.

Two of the successful candidates are natives of Uganda and one of Zanzibar.

Our good fortune in obtaining a number of external examiners from the R.A.M.C. was repeated. The examiners' report was again in the main complimentary, but once more they emphasised the necessity for extending the training given in physiology to two years. In order that extended courses may be put into operation at the school in physiology and anatomy, Makerere Council is endeavouring to engage lecturers in these propaedeutics.

57. No great advance was made in our plans to increase the number of persons trained as hospital assistants, nurses and midwives, as buildings required for these activities could not be erected in time. Construction has now commenced, however, at Lira and Mbale and it is anticipated that the new accommodation will be ready for occupation in 1945, when staff required for this work will, it is hoped, be forthcoming.

XV. LABORATORY.

58. The work undertaken in the laboratory is summarised below :—

1. Parasitology.—

Blood films examined	...	...	...	14,629
Dark Ground examinations	...	...	...	46
Faeces	...	...	...	2,814

2. Serology.—

Kahn tests—blood	...	...	...	15,658
Kahn tests—cerebro-spinal fluid	...	...	...	328
Agglutination tests for Enteric and other fevers	...	...	...	564

3. Bacteriology.—

Blood cultures	...	...	...	780
Urine cultures	...	...	...	123
Faeces cultures	...	...	...	367
Sputum for M. tuberculosis	...	...	...	952
Sputum for P. pestis	...	...	...	545
Swabs and Smears	...	...	...	931
Vaccines prepared	...	...	...	46
Sterility tests on drugs	...	...	...	143
Water samples	...	...	...	48

4. Clinical Pathology.—

Blood counts	...	...	...	1,127
Cerebro-Spinal fluid	...	...	...	528
Pleural and other fluids	...	...	...	528
Urine	...	...	...	1,751
Miscellaneous examinations	...	...	...	66

5. <i>Biochemical examinations</i>	...	...	...	474
6. <i>Autopsies and Histo-pathology.—</i>				
Autopsies—medico-legal	...	...	...	123
Autopsies—Mulago hospital	...	...	...	288
Histo-pathology	...	...	...	533.
7. <i>Chemical examinations.—</i>				
For the Medical Department	...	...	...	57
For the Police	...	...	...	118
For the Industrial Committee	...	...	...	6
For the Supply Board	...	...	...	8
Miscellaneous	...	...	...	18.

XVI. FINANCIAL.

59. A comparison of revenue and expenditure for the years 1943 and 1944 is displayed below :—

There is an increasing tendency, with the march of time, to consider the dispensation of medical amenities on the basis of a State Medical Service. Revenue from these services will in consequence gradually dwindle to negligible proportions.

				1943.			1944.		
				£	s.	cts.	£	s.	cts.
Personal Emoluments	...	...	...	123,375	5	62	125,067	17	44
Other Charges	...	...	...	140,500	1	70	177,553	6	93
				263,875	7	32	302,621	4	37
Special Expenditure	...	...	...	2,088	18	35	3,667	12	07
The Revenue amounted to	...	...	...	14,137	12	62	16,781	7	34

H. DE BOER,
Director of Medical Services.

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VITAL STATISTICS RETURN OF THE UGANDA PROTECTORATE FOR THE YEAR 1944 (AFRICAN POPULATION ONLY).

PROVINCE AND DISTRICT.	TOTAL FOR THE WHOLE YEAR.										ESTIMATED POPULATION.	RATES FOR THE YEAR.				
	Live Births.			Still Births.	Deaths							Birth Rate per 1,000 Population.	Percentage of Still Births to Births plus Still Births.	Infantile Mortality Rate per 1,000 Live Births.	Maternal Mortality per 1,000 Births and Still Births.	Death Rate per 1,000 Population.
					Of Children under 1 Year.			Of Women in Child Birth.	All Other Deaths.	Total Deaths.						
	M.	F.	Total.		M.	F.	Total.									
BUGANDA PROVINCE:—																
Mengo ...	9,427	8,810	18,237	139	870	697	1,567	143	13,604	15,314	553,946	32'92	'76	85'92	7'78	27'64
Masaka ...	3,310	3,057	6,367	38	325	281	606	32	4,015	4,653	206,326	30'86	'59	95'18	4'99	22'55
Mubende ...	991	1,029	2,020	80	87	70	157	12	1,451	1,620	159,639	12'65	3'81	59'40	5'71	10'15
TOTAL ...	13,728	12,896	26,624	257	1,282	1,048	2,330	187	19,070	21,587	919,911	28'94	'96	70'24	6'96	23'47
EASTERN PROVINCE:—																
Busoga ...	3,083	3,028	6,111	254	612	506	1,118	55	6,666	7,833	380,889	16'04	3'99	182'94	8'64	20'56
Central ...	5,419	5,178	10,597	245	677	623	1,300	55	8,151	9,506	562,142	18'85	2'26	122'68	5'07	16'91
Teso ...	2,781	2,677	5,458	11	197	166	363	40	4,436	4,839	286,743	19'03	0'20	66'51	7'31	16'88
*Karamoja ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	11,283	10,883	22,166	510	1,486	1,295	2,781	150	19,247	22,178	1,229,774	18'62	2'25	125'46	6'61	18'03
WESTERN PROVINCE:—																
Toro ...	2,849	2,732	5,581	269	224	206	430	54	2,523	3,007	212,774	26'23	4'59	77'05	9'23	14'13
Ankole ...	3,952	3,851	7,803	268	371	341	712	38	4,967	5,717	305,127	25'57	3'32	91'25	4'71	18'80
Kigezi ...	5,154	5,133	10,287	507	284	254	538	61	5,480	6,079	302,119	34'05	4'69	52'30	5'65	20'12
Lango ...	4,585	4,230	8,815	513	753	576	1,329	71	3,711	5,111	258,175	34'14	5'49	150'76	7'61	19'80
Bunyoro ...	837	724	1,561	136	53	32	85	9	1,040	1,134	118,403	13'18	8'01	54'45	5'30	9'58
Acholi ...	3,591	3,390	6,981	355	887	826	1,713	57	2,574	4,344	223,432	31'24	4'84	245'38	7'77	19'44
West Nile ...	4,961	4,741	9,702	155	871	792	1,663	20	3,592	5,275	291,235	33'31	2'45	171'40	2'73	18'11
TOTAL ...	25,929	24,801	50,730	2,203	3,443	3,027	6,470	310	23,887	30,667	1,711,265	29'64	4'16	127'54	5'86	17'92
UGANDA PROTECTORATE ...	50,940	48,580	99,520	2,970	6,211	5,370	11,581	647	62,204	74,432	3,860,950	25'78	2'90	116'36	6'31	19'28

* The population of Karamoja has been excluded from the total population and from all calculations of rates because no vital statistics are submitted from that district.

